

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2002-083456

(43)Date of publication of application : 22.03.2002

(51)Int.Cl.

G11B 15/10
G06F 3/03
H04N 5/76

(21)Application number : 2000-269208

(71)Applicant : TAMURA SEISAKUSHO CO LTD

(22)Date of filing : 05.09.2000

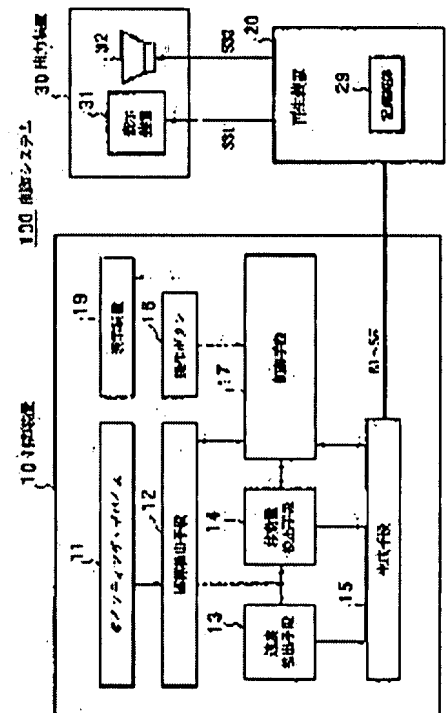
(72)Inventor : YAMAZAKI ATSUSHI

(54) CONTROL DEVICE AND CONTROL SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a control system by which a control device performing operation for control of specific reproduction of a reproducing device can be miniaturized.

SOLUTION: A control system 100 has a reproducing device 20, and a control device 10 controlling the reproducing device 20. The control device 10 has a pointing device 11 of a flat type, a generating means 15 generating a control signal based on a movement direction of a substance rubbing the surface of the pointing device 11, and an operation button 16 setting a mode of the generating means 15. The generating means of a shuttle mode generates control signals S1, S2 for shuttle search based on a movement direction and movement quantity of the substance rubbing the surface of the pointing device 11, a generating means of a jog mode generates control signals S3, S4 for reproduction of variable speed for frame feed reproduction, slow reproduction, or the like based on a movement direction and movement speed of the substance rubbing the surface of the pointing device 11.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the

examiner's decision of rejection or application
converted registration]

[Date of final disposal for application]

[Patent number]

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[Number of appeal against examiner's decision of
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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the control system which has a controlled machine and the control unit which controls this controlled machine, and the control unit which controls a controlled machine.

[0002]

[Description of the Prior Art] In recent years, various pointing devices are developed and commercialized. There are a trackpad, a touch panel, etc. as an example of a pointing device.

[0003] There is a thing which can search right reverse in the regenerative apparatus which reproduces recording information by the jog dial and the shuttle dial from the record medium which recorded video information. For example, a regenerative apparatus is used as a controlled machine and some which prepared the jog dial and the shuttle dial are in the control device which controls this regenerative apparatus. Generally, a jog dial can perform slow playback of right reverse, coma delivery playback, etc., and a shuttle dial can perform speed playback of right reverse.

[0004]

[Problem(s) to be Solved by the Invention] Since a conventional jog dial and a conventional shuttle dial turn and are operated with a hand or a finger, they are difficult to miniaturize, and the miniaturization of a control unit is difficult for them. The 1st purpose of this invention is a control system which has a controlled machine and a control unit, and is with the control system which can miniaturize the control unit with which actuation for control of a controlled machine is performed, and this control system to offer an usable control unit. The 2nd purpose of this invention is a control system which has a regenerative apparatus and the control unit which performs control of this regenerative apparatus, and is with the control system which can miniaturize the control unit with which actuation for control of special playback of a regenerative apparatus is performed, and this control system to offer an usable control unit.

[0005]

[Means for Solving the Problem] The control unit concerning this invention is a control unit which generates the control signal which controls a controlled machine, and has a plane pointing device and a generation means to generate said control signal based on the migration direction of the body against which the front face of said pointing device is ground.

[0006] In the control device concerning this invention, said generation means generates said control signal suitably based on the objective migration direction and the movement magnitude which grind the front face of said pointing device. In the control device concerning this invention, said generation means generates said control signal suitably based on the migration direction of the body against which the front face of said pointing device is ground, and the speed of migration.

[0007] The control device concerning this invention has an indicating equipment further suitably, said pointing device has a touch panel, and said touch panel is arranged on the display screen of said indicating equipment.

[0008] In the control unit concerning this invention, said controlled machine is a regenerative apparatus which performs playback of the recording information recorded on the record medium based on said control signal suitably, and said generation means generates said control signal which reproduces hard flow, when said control signal which reproduces the forward direction when said body grinds said front face rightward is generated and said body grinds said front face leftward.

[0009] In the control unit concerning this invention, said generation means generates more suitably said control signal

to which said playback is made to carry out with the speed according to the movement magnitude of said body. Said generation means of the control unit concerning this invention is good also as a configuration which generates said control signal which stops said playback, for example, when said control signal which maintains the speed of said playback just before separating from said front face, when said body separates from said front face is generated and said body clicks said front face.

[0010] In the control unit concerning this invention, suitably said controlled machine It is the regenerative apparatus which performs playback of the recording information recorded on the record medium based on said control signal. Said generation means When said body contacts said front face and the direction ground first is the right When said control signal which reproduces the forward direction is generated, said body contacts said front face, while said body touched said front face and the direction ground first is the left While said body touches said front face, said control signal which reproduces hard flow is generated.

[0011] In the control unit concerning this invention, more suitably, said generation means is the speed according to the speed to which said body moves said front face, and generates said control signal to which said playback is made to carry out. Said generation means of the control unit concerning this invention is good also as a configuration which generates said control signal which stops said playback, for example, when said body leaves said front face.

[0012] The control system concerning this invention is a control system which has a controlled machine and the control device which generates the control signal which controls this controlled machine, and said control device has a plane pointing device and a generation means to generate said control signal based on the migration direction of the body against which the front face of said pointing device is ground.

[0013] In the control system concerning this invention, said generation means generates said control signal suitably based on the objective migration direction and the movement magnitude which grind the front face of said pointing device. In the control system concerning this invention, said generation means generates said control signal suitably based on the migration direction of the body against which the front face of said pointing device is ground, and the speed of migration.

[0014] In the control system concerning this invention, suitably, said control device has an indicating equipment further, said pointing device has a touch panel, and said touch panel is arranged on the display screen of said indicating equipment.

[0015] In the control system concerning this invention, said controlled machine is a regenerative apparatus which performs playback of the recording information recorded on the record medium based on said control signal suitably, and said generation means generates said control signal which reproduces hard flow, when said control signal which reproduces the forward direction when said body grinds said front face rightward is generated and said body grinds said front face leftward.

[0016] In the control system concerning this invention, said generation means generates more suitably said control signal to which said playback is made to carry out with the speed according to the movement magnitude of said body. In the control system concerning this invention, said generation means generates said control signal which stops said playback, for example, when said control signal which maintains the speed of said playback just before separating from said front face when said body separates from said front face is generated and said body clicks said front face.

[0017] In the control system concerning this invention, suitably said controlled machine It is the regenerative apparatus which performs playback of the recording information recorded on the record medium based on said control signal. Said generation means When said body contacts said front face and the direction ground first is the right When said control signal which reproduces the forward direction is generated, said body contacts said front face, while said body touched said front face and the direction ground first is the left While said body touches said front face, said control signal which reproduces hard flow is generated.

[0018] In the control system concerning this invention, more suitably, said generation means is the speed according to the speed to which said body moves said front face, and generates said control signal to which said playback is made to carry out. In the control system concerning this invention, said generation means is good also as a configuration which generates said control signal which stops said playback, for example, when said body leaves said front face.

[0019] Since a control device generates the control signal for controlled machines based on the migration direction of the body against which the front face of a plane pointing device is ground, it can make an input unit a plane and can miniaturize a control device compared with the case where the input unit of a dial configuration is used. Moreover, by generating a control signal based on the migration direction, the front face of a pointing device can be used widely and

the operability of a control unit can be improved.

[0020]

[Embodiment of the Invention] Hereafter, the gestalt of operation of this invention is explained with reference to an accompanying drawing.

[0021] Drawing 1 is the rough block diagram showing the gestalt of operation of the control system concerning this invention. A control system 100 has a control unit 10, the regenerative apparatus 20 which is a controlled machine controlled by this control unit 10, and an output unit 30.

[0022] A control device 10 has the plane pointing device 11, the coordinate detection means 12, the speed detection means 13, the movement magnitude detection means 14, the generation means 15, a manual operation button 16, a control means 17, and a display 19.

[0023] A manual operation button 16 is a carbon button for a setup which sets the generation means 15 as normal mode, jog mode, or shuttle mode. In addition, under normal mode, a setup of the Normal playback, rapid-traverse playback, rewinding playback, etc. is possible for a manual operation button 16, and playback actuation corresponding to the setup concerned is performed by the regenerative apparatus 20.

[0024] A control means 17 is a controller which controls the whole control device 10, and controls a pointing device 11, the coordinate detection means 12, the speed detection means 13, the movement magnitude detection means 14, the generation means 15, a display 19, etc. Moreover, the input signal inputted into the manual operation button 16 is supplied, and a control means 17 sets the generation means 15 as normal mode, jog mode, or shuttle mode based on the input signal concerned.

[0025] A display 19 performs various displays under control of a control means 17. For example, an indicating equipment 19 performs the display corresponding to the set-up mode, when the generation means 15 is set as normal mode, jog mode, or shuttle mode. The display screen of the normal mode of an indicating equipment 19 and the display screen in jog mode differ from the display screen in shuttle mode.

[0026] A pointing device 11 has a touch panel and this touch panel is arranged on the display screen of a display 19. The operator of a control device 10 inputs a signal into a pointing device 11 grinding the front face of a pointing device 11 against a finger etc., or by touching. The magnitude of the front face of a touch panel sets a longitudinal direction to 10cm as an example, and sets a lengthwise direction to 6cm. A pointing device 11 supplies the input signal which the user inputted to the coordinate detection means 12.

[0027] The coordinate detection means 12 detects the coordinate of bodies, such as a finger in contact with the front face of a pointing device 11, based on the signal from a pointing device 11, and outputs the position signal which shows the coordinate concerned to the speed detection means 13 and the movement magnitude detection means 14.

[0028] The speed detection means 13 detects the speed and the migration direction to which the position signal from the coordinate detection means 12 is differentiated, and a body moves, and outputs the speed signal which shows the speed concerned and the migration direction to the generation means 15.

[0029] Based on the position signal from the coordinate detection means 12, the movement magnitude detection means 14 detects the movement magnitude of the body from the starting point when the body contacted the touch panel, and outputs the movement magnitude signal which shows the movement magnitude concerned to the generation means 15. Moreover, when a body clicks a front face, the signal which shows that the click was carried out is outputted to the generation means 15. Moreover, when a body separates from a touch panel, the signal which shows what the body left is outputted to the generation means 15.

[0030] In normal mode, shuttle mode, and jog mode, the generation means 15 generates a control signal and outputs it to a regenerative apparatus 20. The generation means 15 in shuttle mode generates the 1st control signal S1 which reproduces the forward direction, when a body grinds the front face of a pointing device 11 rightward (it goes to the front face concerned and is the right). The generation means 15 in shuttle mode generates the 2nd control signal S2 which reproduces hard flow, when a body grinds the front face of a pointing device 11 leftward (it goes to the front face concerned and is the left).

[0031] The 1st and 2nd control signals S1 and S2 are the speed according to the movement magnitude of the body in contact with the front face of a pointing device 11, and have rate information which makes it reproduce. The 1st and 2nd control signals S1 and S2 have maintenance information which maintains the speed of playback just before separating from a front face, when a body separates from the front face of a pointing device 11. Thus, a shuttle search with a regenerative apparatus 20 is possible by the 1st and 2nd control signals S1 and S2. The generation means 15 in

shuttle mode generates the 3rd control signal S3 which stops playback, when a body clicks the front face of a pointing device 11.

[0032] When a body contacts the front face of a pointing device 11 and the direction ground first is the right, the generation means 15 in jog mode generates 4th control signal S4 which reproduces the forward direction, while the body touches the front face. When a body contacts the front face of a pointing device 11 and the direction ground first is the left, the generation means 15 in jog mode generates the 5th control signal S5 which reproduces hard flow, while the body touches the front face.

[0033] The 4th and 5th control signal S4, and S5 are the speed according to the speed to which a body moves the front face of a pointing device 11, and have rate information which makes it reproduce. Thus, the 4th and 5th control signal S4, and S5 can perform adjustable-speed playback of slow playback with a regenerative apparatus 20, coma delivery playback, etc. The generation means 15 in jog mode generates the 3rd control signal S3 which stops playback, when a body leaves the front face of a pointing device 11.

[0034] A regenerative apparatus 20 outputs the regenerative signals S31 and S32 which reproduce recording information recorded on the record medium 29, and show the reproduced recording information to an output unit 30 based on the control signal from a control unit 10. Recording information is good also as video information, and good also as video information and audio information. An output unit 30 has a display 31 and a loudspeaker 32. An indicating equipment 31 displays playback information on the display screen based on the regenerative signal S31 which shows the video information from a regenerative apparatus 20. A loudspeaker 32 carries out the voice output of the playback information based on the regenerative signal S32 which shows the audio information from a regenerative apparatus 20.

[0035] For example, a regenerative apparatus 20 reproduces the forward direction based on the 1st control signal S1 from a control device 10 with the speed according to the movement magnitude to which the body moved the front face of a pointing device 11. Moreover, a regenerative apparatus 20 reproduces hard flow based on the 2nd control signal S2 from a control device 10 with the speed according to the movement magnitude to which the body moved the front face of a pointing device 11. Furthermore, a regenerative apparatus 20 maintains reproduction speed just before a body separates from a front face based on the 1st and 2nd control signals S1 and the maintenance information in S2, when a body separates from the front face of a pointing device 11. Moreover, a regenerative apparatus 20 suspends playback based on the 3rd control signal S3 from a control unit 10.

[0036] For example, a regenerative apparatus 20 reproduces the forward direction based on 4th control signal S4 from a control device 10 with the speed according to the speed to which a body moves the front face of a pointing device 11. Moreover, a regenerative apparatus 20 reproduces hard flow based on the 5th control signal S5 from a control device 10 with the speed according to the speed to which a body moves the front face of a pointing device 11.

[0037] On the touch panel of a pointing device 11, the manual operation button which changes jog mode and shuttle mode may be arranged by using a manual operation button 16 as two or more carbon buttons, and combining with the display screen of an indicating equipment 19. By doing in this way, a mode change can be performed quickly and operability can be improved.

[0038] In addition, as a pointing device 11, a trackpad may be used, and in this case, it arranges so that the display screen and the trackpad of a display 19 may not be lapped. A control unit 10 is used as remote control (remote control equipment), and this remote control is good also as a configuration which transmits a control signal to a regenerative apparatus 20 by radio with a regenerative apparatus 20. A regenerative apparatus 20 and an output unit 30 may be constituted in one, and a regenerative apparatus 20 is good also as a configuration which has an output unit 30. Moreover, the gestalt of the above-mentioned implementation is instantiation of this invention, and this invention is not limited to the gestalt of the above-mentioned implementation.

[0039]

[Effect of the Invention] As explained above, according to this invention, it is the control system which has a controlled machine and a control unit, and an usable control unit can be offered with the control system which can miniaturize the control unit with which actuation for control of a controlled machine is performed, and this control system. Moreover, an usable control unit can be offered with the control system which can miniaturize the control unit with which actuation for control of special playback of a regenerative apparatus is performed by using a controlled machine as a regenerative apparatus, and this control system.

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PRIOR ART

[Description of the Prior Art] In recent years, various pointing devices are developed and commercialized. There are a trackpad, a touch panel, etc. as an example of a pointing device.

[0003] There is a thing which can search right reverse in the regenerative apparatus which reproduces recording information by the jog dial and the shuttle dial from the record medium which recorded video information. For example, a regenerative apparatus is used as a controlled machine and some which prepared the jog dial and the shuttle dial are in the control device which controls this regenerative apparatus. Generally, a jog dial can perform slow playback of right reverse, coma delivery playback, etc., and a shuttle dial can perform speed playback of right reverse.

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TECHNICAL FIELD

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EFFECT OF THE INVENTION

[Effect of the Invention] As explained above, according to this invention, it is the control system which has a controlled machine and a control unit, and an usable control unit can be offered with the control system which can miniaturize the control unit with which actuation for control of a controlled machine is performed, and this control system. Moreover, an usable control unit can be offered with the control system which can miniaturize the control unit with which actuation for control of special playback of a regenerative apparatus is performed by using a controlled machine as a regenerative apparatus, and this control system.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] Since a conventional jog dial and a conventional shuttle dial turn and are operated with a hand or a finger, they are difficult to miniaturize, and the miniaturization of a control unit is difficult for them. The 1st purpose of this invention is a control system which has a controlled machine and a control unit, and is with the control system which can miniaturize the control unit with which actuation for control of a controlled machine is performed, and this control system to offer an usable control unit. The 2nd purpose of this invention is a control system which has a regenerative apparatus and the control unit which performs control of this regenerative apparatus, and is with the control system which can miniaturize the control unit with which actuation for control of special playback of a regenerative apparatus is performed, and this control system to offer an usable control unit.

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MEANS

[Means for Solving the Problem] The control unit concerning this invention is a control unit which generates the control signal which controls a controlled machine, and has a plane pointing device and a generation means to generate said control signal based on the migration direction of the body against which the front face of said pointing device is ground.

[0006] In the control device concerning this invention, said generation means generates said control signal suitably based on the objective migration direction and the movement magnitude which grind the front face of said pointing device. In the control device concerning this invention, said generation means generates said control signal suitably based on the migration direction of the body against which the front face of said pointing device is ground, and the speed of migration.

[0007] The control device concerning this invention has an indicating equipment further suitably, said pointing device has a touch panel, and said touch panel is arranged on the display screen of said indicating equipment.

[0008] In the control unit concerning this invention, said controlled machine is a regenerative apparatus which performs playback of the recording information recorded on the record medium based on said control signal suitably, and said generation means generates said control signal which reproduces hard flow, when said control signal which reproduces the forward direction when said body grinds said front face rightward is generated and said body grinds said front face leftward.

[0009] In the control unit concerning this invention, said generation means generates more suitably said control signal to which said playback is made to carry out with the speed according to the movement magnitude of said body. Said generation means of the control unit concerning this invention is good also as a configuration which generates said control signal which stops said playback, for example, when said control signal which maintains the speed of said playback just before separating from said front face, when said body separates from said front face is generated and said body clicks said front face.

[0010] In the control unit concerning this invention, suitably said controlled machine It is the regenerative apparatus which performs playback of the recording information recorded on the record medium based on said control signal. Said generation means When said body contacts said front face and the direction ground first is the right When said control signal which reproduces the forward direction is generated, said body contacts said front face, while said body touched said front face and the direction ground first is the left While said body touches said front face, said control signal which reproduces hard flow is generated.

[0011] In the control unit concerning this invention, more suitably, said generation means is the speed according to the speed to which said body moves said front face, and generates said control signal to which said playback is made to carry out. Said generation means of the control unit concerning this invention is good also as a configuration which generates said control signal which stops said playback, for example, when said body leaves said front face.

[0012] The control system concerning this invention is a control system which has a controlled machine and the control device which generates the control signal which controls this controlled machine, and said control device has a plane pointing device and a generation means to generate said control signal based on the migration direction of the body against which the front face of said pointing device is ground.

[0013] In the control system concerning this invention, said generation means generates said control signal suitably based on the objective migration direction and the movement magnitude which grind the front face of said pointing device. In the control system concerning this invention, said generation means generates said control signal suitably

based on the migration direction of the body against which the front face of said pointing device is ground, and the speed of migration.

[0014] In the control system concerning this invention, suitably, said control device has an indicating equipment further, said pointing device has a touch panel, and said touch panel is arranged on the display screen of said indicating equipment.

[0015] In the control system concerning this invention, said controlled machine is a regenerative apparatus which performs playback of the recording information recorded on the record medium based on said control signal suitably, and said generation means generates said control signal which reproduces hard flow, when said control signal which reproduces the forward direction when said body grinds said front face rightward is generated and said body grinds said front face leftward.

[0016] In the control system concerning this invention, said generation means generates more suitably said control signal to which said playback is made to carry out with the speed according to the movement magnitude of said body. In the control system concerning this invention, said generation means generates said control signal which stops said playback, for example, when said control signal which maintains the speed of said playback just before separating from said front face when said body separates from said front face is generated and said body clicks said front face.

[0017] In the control system concerning this invention, suitably said controlled machine It is the regenerative apparatus which performs playback of the recording information recorded on the record medium based on said control signal. Said generation means When said body contacts said front face and the direction ground first is the right When said control signal which reproduces the forward direction is generated, said body contacts said front face, while said body touched said front face and the direction ground first is the left While said body touches said front face, said control signal which reproduces hard flow is generated.

[0018] In the control system concerning this invention, more suitably, said generation means is the speed according to the speed to which said body moves said front face, and generates said control signal to which said playback is made to carry out. In the control system concerning this invention, said generation means is good also as a configuration which generates said control signal which stops said playback, for example, when said body leaves said front face.

[0019] Since a control device generates the control signal for controlled machines based on the migration direction of the body against which the front face of a plane pointing device is ground, it can make an input unit a plane and can miniaturize a control device compared with the case where the input unit of a dial configuration is used. Moreover, by generating a control signal based on the migration direction, the front face of a pointing device can be used widely and the operability of a control unit can be improved.

[0020]

[Embodiment of the Invention] Hereafter, the gestalt of operation of this invention is explained with reference to an accompanying drawing.

[0021] Drawing 1 is the rough block diagram showing the gestalt of operation of the control system concerning this invention. A control system 100 has a control unit 10, the regenerative apparatus 20 which is a controlled machine controlled by this control unit 10, and an output unit 30.

[0022] A control device 10 has the plane pointing device 11, the coordinate detection means 12, the speed detection means 13, the movement magnitude detection means 14, the generation means 15, a manual operation button 16, a control means 17, and a display 19.

[0023] A manual operation button 16 is a carbon button for a setup which sets the generation means 15 as normal mode, jog mode, or shuttle mode. In addition, under normal mode, a setup of the Normal playback, rapid-traverse playback, rewinding playback, etc. is possible for a manual operation button 16, and playback actuation corresponding to the setup concerned is performed by the regenerative apparatus 20.

[0024] A control means 17 is a controller which controls the whole control device 10, and controls a pointing device 11, the coordinate detection means 12, the speed detection means 13, the movement magnitude detection means 14, the generation means 15, a display 19, etc. Moreover, the input signal inputted into the manual operation button 16 is supplied, and a control means 17 sets the generation means 15 as normal mode, jog mode, or shuttle mode based on the input signal concerned.

[0025] A display 19 performs various displays under control of a control means 17. For example, an indicating equipment 19 performs the display corresponding to the set-up mode, when the generation means 15 is set as normal mode, jog mode, or shuttle mode. The display screen of the normal mode of an indicating equipment 19 and the display

screen in jog mode differ from the display screen in shuttle mode.

[0026] A pointing device 11 has a touch panel and this touch panel is arranged on the display screen of a display 19. The operator of a control device 10 inputs a signal into a pointing device 11 grinding the front face of a pointing device 11 against a finger etc., or by touching. The magnitude of the front face of a touch panel sets a longitudinal direction to 10cm as an example, and sets a lengthwise direction to 6cm. A pointing device 11 supplies the input signal which the user inputted to the coordinate detection means 12.

[0027] The coordinate detection means 12 detects the coordinate of bodies, such as a finger in contact with the front face of a pointing device 11, based on the signal from a pointing device 11, and outputs the position signal which shows the coordinate concerned to the speed detection means 13 and the movement magnitude detection means 14.

[0028] The speed detection means 13 detects the speed and the migration direction to which the position signal from the coordinate detection means 12 is differentiated, and a body moves, and outputs the speed signal which shows the speed concerned and the migration direction to the generation means 15.

[0029] Based on the position signal from the coordinate detection means 12, the movement magnitude detection means 14 detects the movement magnitude of the body from the starting point when the body contacted the touch panel, and outputs the movement magnitude signal which shows the movement magnitude concerned to the generation means 15. Moreover, when a body clicks a front face, the signal which shows that the click was carried out is outputted to the generation means 15. Moreover, when a body separates from a touch panel, the signal which shows what the body left is outputted to the generation means 15.

[0030] In normal mode, shuttle mode, and jog mode, the generation means 15 generates a control signal and outputs it to a regenerative apparatus 20. The generation means 15 in shuttle mode generates the 1st control signal S1 which reproduces the forward direction, when a body grinds the front face of a pointing device 11 rightward (it goes to the front face concerned and is the right). The generation means 15 in shuttle mode generates the 2nd control signal S2 which reproduces hard flow, when a body grinds the front face of a pointing device 11 leftward (it goes to the front face concerned and is the left).

[0031] The 1st and 2nd control signals S1 and S2 are the speed according to the movement magnitude of the body in contact with the front face of a pointing device 11, and have rate information which makes it reproduce. The 1st and 2nd control signals S1 and S2 have maintenance information which maintains the speed of playback just before separating from a front face, when a body separates from the front face of a pointing device 11. Thus, a shuttle search with a regenerative apparatus 20 is possible by the 1st and 2nd control signals S1 and S2. The generation means 15 in shuttle mode generates the 3rd control signal S3 which stops playback, when a body clicks the front face of a pointing device 11.

[0032] When a body contacts the front face of a pointing device 11 and the direction ground first is the right, the generation means 15 in jog mode generates 4th control signal S4 which reproduces the forward direction, while the body touches the front face. When a body contacts the front face of a pointing device 11 and the direction ground first is the left, the generation means 15 in jog mode generates the 5th control signal S5 which reproduces hard flow, while the body touches the front face.

[0033] The 4th and 5th control signal S4, and S5 are the speed according to the speed to which a body moves the front face of a pointing device 11, and have rate information which makes it reproduce. Thus, the 4th and 5th control signal S4, and S5 can perform adjustable-speed playback of slow playback with a regenerative apparatus 20, coma delivery playback, etc. The generation means 15 in jog mode generates the 3rd control signal S3 which stops playback, when a body leaves the front face of a pointing device 11.

[0034] A regenerative apparatus 20 outputs the regenerative signals S31 and S32 which reproduce recording information recorded on the record medium 29, and show the reproduced recording information to an output unit 30 based on the control signal from a control unit 10. Recording information is good also as video information, and good also as video information and audio information. An output unit 30 has a display 31 and a loudspeaker 32. An indicating equipment 31 displays playback information on the display screen based on the regenerative signal S31 which shows the video information from a regenerative apparatus 20. A loudspeaker 32 carries out the voice output of the playback information based on the regenerative signal S32 which shows the audio information from a regenerative apparatus 20.

[0035] For example, a regenerative apparatus 20 reproduces the forward direction based on the 1st control signal S1 from a control device 10 with the speed according to the movement magnitude to which the body moved the front face

of a pointing device 11. Moreover, a regenerative apparatus 20 reproduces hard flow based on the 2nd control signal S2 from a control device 10 with the speed according to the movement magnitude to which the body moved the front face of a pointing device 11. Furthermore, a regenerative apparatus 20 maintains reproduction speed just before a body separates from a front face based on the 1st and 2nd control signals S1 and the maintenance information in S2, when a body separates from the front face of a pointing device 11. Moreover, a regenerative apparatus 20 suspends playback based on the 3rd control signal S3 from a control unit 10.

[0036] For example, a regenerative apparatus 20 reproduces the forward direction based on 4th control signal S4 from a control device 10 with the speed according to the speed to which a body moves the front face of a pointing device 11.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the rough block diagram showing the gestalt of operation of the control system concerning this invention.

[Description of Notations]

10 [-- A speed detection means, 14 / -- A movement magnitude detection means, 15 / -- A generation means, 16 / -- A manual operation button, 17 / -- A control means, 19 / -- A display, 20 / -- A regenerative apparatus, 29 / -- A record medium, 30 / -- An output unit, 31 / -- A display, 32 / -- A loudspeaker, 100 / -- Control system.] -- A control device, 11 -- A pointing device, 12 -- A coordinate detection means, 13

[Translation done.]

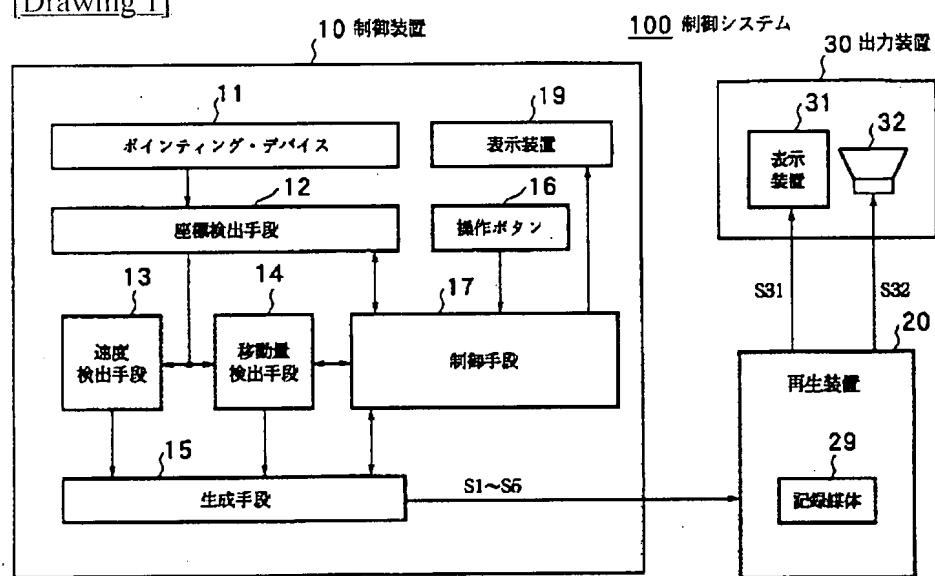
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DRAWINGS

[Drawing 1]



[Translation done.]